

The Healthcare Forum



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Risky Business was developed by High Performance Systems, Inc. and Breakthrough Learning, Inc. in partnership with The Healthcare Forum. Support was provided by:

3M Foundation

Abbott Northwestern Hospital - Allina Health Systems
Baylor Health Care System
Cedars-Sinai Medical Center
Good Samaritan Health System
Group Health Cooperative of Puget Sound
HealthPartners of Southern Arizona
Kaiser Permanente
Legacy Health System
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PURPOSE AND USE OF *RISKY BUSINESS*

Risky Business: Mastering the New Business of Health was developed to support the needs of healthcare leaders to build capacity for designing policies capable of optimizing health of a defined population, while simultaneously realizing strong business performance in a delivery system.

Designed as a team-learning experience, typically in a workshop or retreat setting, participants engage in a process of exploring the forces that shape and influence population health and delivery system performance. Teams may include members from diverse disciplines and functions—from board members to physician leaders to managers and staff.

Through progressive exploration, experimentation and reflection, participants are guided by a leader or facilitator who provides structure to the learning experience and an opportunity to transfer learnings to organizational policies and practices.

Learning objectives include the following:

- Understand core interrelationships among population health and healthcare delivery.
- Learn about the impact of prevention, cessation, screening and treatment practices on population health.
- Gain insight about the challenges and implications of balancing near-term financial requirements with long-term investments.
- Enhance shared understanding and strategic thinking among team members.
- Improve individual and team capacity to think systemically.

Note that the information portrayed in the simulation, while based on substantial, national data, is not comprehensive, authoritative or prescriptive. It is instead intended to be illustrative of the kinds of issues and dynamics that are at play when one considers a population and the abilities of a healthcare delivery system to influence population health status.

TEAM PREPARATION

Date: _____ *Location:* _____

Team Members: _____

Reflect on “optimizing health and business performance”—its meaning and relevance to your work—and note your thoughts:

1 What is “health”? How do we define it within our healthcare system...within our community?

2 What does *optimizing* health mean to us?

3 Who is our defined population(s)?

continued...

4 How do we currently measure and monitor the health of our population?

5 How do we currently measure and monitor the success of our healthcare delivery system?

6 In what ways does our organization bear risk?

7 Do we have strategies to manage the risk? Do we have strategies to optimize the health of our defined population(s)?

8 What are some of our dilemmas or questions?

PRACTICE FIELD 1

STRATEGY #1

Our System: Large Medium Small

Capitation Scenario: _____% in 1997 to _____% in 2017

No Pay Percent: _____% in 1997 to _____% in 2017

Key Performance Objectives...

...and our Current Reality

Reduce need per person

- Need per person is beginning to grow as the population ages

Increase surplus percentage

- Our surplus is in jeopardy as both costs and pressure on price increase

Improve customer satisfaction

- Customers generally satisfied, but we need to do better to compete

Synopsis of our Strategy (overview of our approach and what we expect it to yield):

continued...

Planned Pattern of Lever-Pulling, 1997 to 2017	
Human Resources	
–	Hiring %
–	Downsize %
–	HR Utilization %
Clinical Programs & Practices	
–	Investments
Infrastructure	
–	Investments
Borrowing	
–	% Financed
–	Short Term Borrowing
Pricing	
–	Avg. FFS Charge
–	Avg. PMPM Charge

Key Performance Indicators

At 5-Year Intervals...	1998	2003	2008	2013	2018
Need\Person\Year					
Surplus %					
Customer Satisfaction					

PRACTICE FIELD 1

STRATEGY #2

Our System: Large Medium Small

Capitation Scenario: _____% in 1997 to _____% in 2017

No Pay Percent: _____% in 1997 to _____% in 2017

Key Performance Objectives...

...and our Current Reality

Reduce need per person

- Need per person is beginning to grow as the population ages

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Clinical Programs & Practices	
–	Investments
Infrastructure	
–	Investments
Borrowing	
–	% Financed
–	Short Term Borrowing
Pricing	
–	Avg. FFS Charge
–	Avg. PMPM Charge

PRACTICE FIELD 1

SIMULATION RESULTS 2

Key Performance Indicators

At 5-Year Intervals...	1998	2003	2008	2013	2018
Need\Person\Year					
Surplus %					
Customer Satisfaction					

PRACTICE FIELD 1

STRATEGY #3

Our System: Large Medium Small

Capitation Scenario: _____% in 1997 to _____% in 2017

No Pay Percent: _____% in 1997 to _____% in 2017

Key Performance Objectives ...

...and our Current Reality

Reduce need per person

- Need per person is beginning to grow as the population ages

Increase surplus percentage

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Improve customer satisfaction

- Customers generally satisfied, but we need to do better to compete

Synopsis of our Strategy (overview of our approach and what we expect it to yield):

continued...

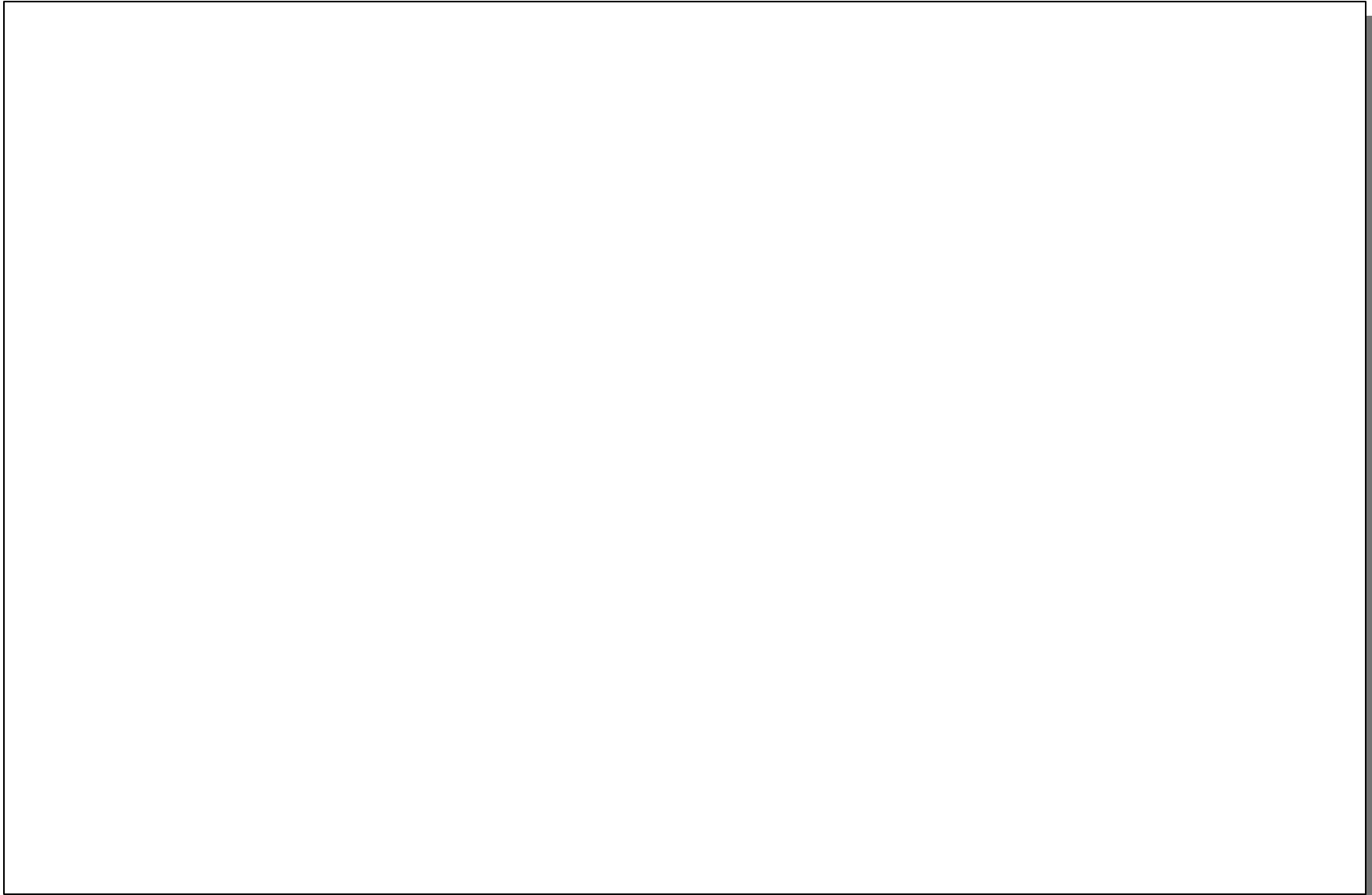
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Key Performance Indicators

At 5-Year Intervals...	1998	2003	2008	2013	2018
Need\Person\Year					
Surplus %					
Customer Satisfaction					

PRACTICE FIELD 1

INSIGHTS, QUESTIONS

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PRACTICE FIELD 2

STRATEGY #1

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—	Downsize %
—	HR Utilization %
Clinical Programs & Practices	
—	Prevention
—	Cessation
—	Screening
—	Treatment
Infrastructure	
—	Core Plant
—	Information Systems
—	Process Improvement
Borrowing	
—	% Financed
—	Short Term Borrowing
Pricing	
—	Avg. FFS Charge
—	Avg. PMPM Charge

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At 5-Year Intervals...	1998	2003	2008	2013	2018
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Surplus %					
Customer Satisfaction					

PRACTICE FIELD 2

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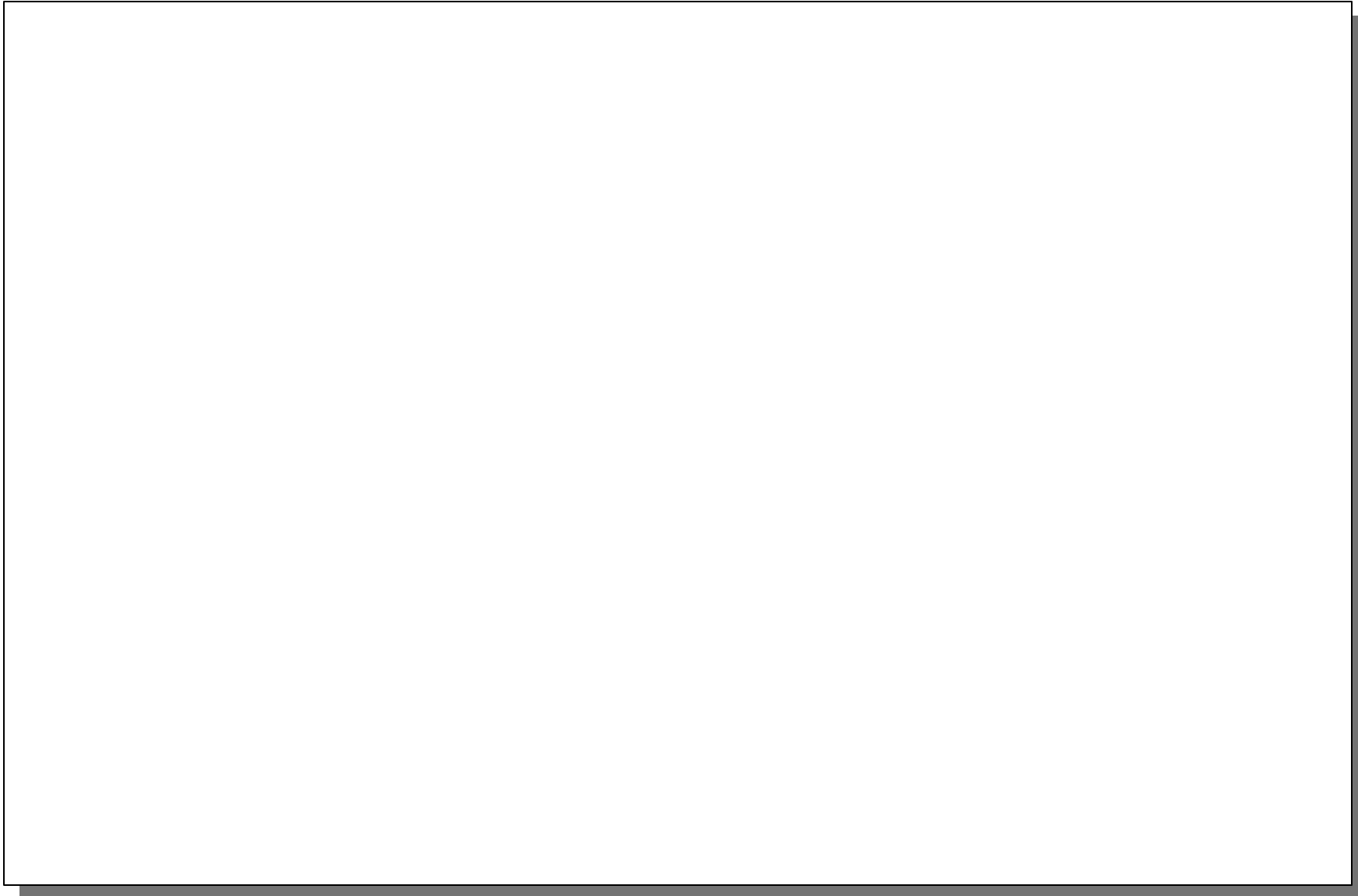
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Surplus %					
Customer Satisfaction					

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ACTION PLANNER

VISION *A future state that you want to create in your organization or community*

OBJECTIVES *A few measurable outcomes which, if achieved, would indicate substantial progress toward achieving the vision*

GIVENS *The core assumptions/facts or the compelling reasons to allocate resources to the challenge suggested by the vision and objectives...often expressed as the gap between your current reality and your objectives*

CRITICAL SUCCESS FACTORS *The most essential ingredients for success*

OBSTACLES *Key barriers you anticipate; what your organization (or your team) will have to overcome to be able to make substantial progress*

continued...


STRATEGY *Your view of the key elements of a strategy for your organization, both short-term and long-term*

When and how your organization (or your team) will formalize and communicate a strategy; if a strategy is in place, when and how your organization will re-examine it

ACTIONS *Key actions that you—as an individual—will take to make the best contribution possible to achieving the vision, given all of the above*

REFERENCE

GLOSSARY OF TERMS

This picture , which accompanies some of the terms below, indicates which terms represent strategy levers in the simulation, and in which of the Practice Fields they appear. All other terms are outputs whose numeric values can be found in the tables and graphs of results.

Approval Index

The approval index indicates whether lenders consider your delivery system an acceptable risk for a loan. A value of “1” means you can borrow; a value of “0” means you’ve been denied. To be approved by lenders, your delivery system may not exceed a level of debt beyond 60% of total assets, and it must exceed a liquidity index (definition below) of 70%.

Average Knowledge Level

The human resources of your delivery system carry an average knowledge level per person, which affects both quality and productivity. The initial average knowledge level is reported as a value of 80.

Knowledge level changes over time. New recruits bring knowledge (70 units each), and people who leave take knowledge with them (95 units each, or more if your Service Index is high). People in your delivery system learn as they gain experience; their *rate* of learning is influenced by the condition of the infrastructure (information systems and process improvement activities), and it is limited by high levels of burnout or fear. Finally, 2.5% of the accumulated learning of the workforce becomes obsolete each year, so that continuous learning is required to at least stay even.

Book Value of Assets

The book value of assets represents the total assets of your delivery system. It is the sum of current cash and the value of physical assets (which is the historical cost of those assets less accumulated depreciation).

The book value of assets is used to calculate your debt\asset percentage, which is one of the key indicators used by lenders to determine whether you can borrow more money.

Burnout

Burnout represents the level of stress among your delivery system’s human resources that is associated with workload. Burnout adversely affects both service quality and the rate of learning in your delivery system. (continued...)

When the delivery of services exceeds manageable workload levels (i.e., utilization of human resources in excess of 100%), people will feel the stress. Burnout is shown as an index which runs from 0 to a theoretical upper limit of 100. A value of 0 means no burnout is evident, while a value of 15 means “toasted.”

Capitation

Capitation is a method of payment for the delivery of healthcare services in which the healthcare delivery system receives a fixed monthly payment per person enrolled in an HMO-type health plan. The delivery system is therefore financially “at risk”—the more services that enrollees require, the greater the expenses of

the delivery system. Since revenues are fixed and unrelated to units of service delivery, the delivery system has a strong incentive to keep its “capitated” population as healthy as possible.

In most areas of the U.S., there is a strong trend of employee benefit plans, Medicaid and Medicare shifting to capitation-type health plans—leading to the common prediction that capitation will become the dominant form of payment during the next decade.

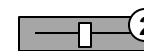
Cash

Cash is the amount of money you have available at the current time. Revenue and borrowing adds to cash, and spending (for operating expenses, debt repayments and interest payments, investments) uses it up.

Cessation

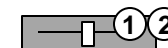
Cessation programs and practices—a subset of Clinical Programs and Practices (see below)—are those aimed at people who are engaging in risky behaviors (such as tobacco use) with the goal of getting them to quit. People who quit risky behaviors do show reduced incidence of disease later in life. Cessation programs have not been fully effective, however. Under the best circumstances, 10 to 35% of people do quit the behavior; then within 2 years, 10 to 20% return to the behavior.

Initially, 5% of your delivery system’s clinical programs are committed to cessation.



Clinical Programs and Practices

Clinical programs include those aimed at prevention or cessation of risky behaviors and those aimed at screening for or treatment of diseases and other conditions requiring health care. Clinical programs include patient-care programs delivered by physicians, nurses, technicians, educators, and other clinical personnel.



Clinical practices represent the protocol and processes by which clinical personnel deliver care. In a sophisticated delivery system, one would expect that as new clinical knowledge is developed, it would be put into practice in a consistent and coordinated way so that care delivery is as effective as possible.

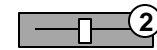
When you invest in Clinical Programs and Practices, you are adding programs to or improving practices within your existing portfolio. The scope and sophistication of your initial Clinical programs and practices is initially assumed to be average for integrated delivery systems in the size category you select.

Competitor

Competitor refers to another healthcare delivery system in your market area. Competitors provide pressure on your delivery system to keep up at least a comparable level of performance (in terms of service quality, access and cost). If your delivery system falls behind, you will find members of your defined population moving to competitors and you will see a loss of market share.

Conditions

Conditions in the population represent diseases (e.g., cancer, diabetes) and other circumstances in which people require more than routine health care (e.g., major injuries, acute depression). The incidence rate of conditions is associated with age (and heredity factors), the extent to which people have engaged in behaviors (e.g., tobacco use, alcoholism) which place them at risk for conditions, and the relative toxicity of the environment.



Core Plant

Core Plant represents the delivery system's facilities and equipment, which span a range of settings and locations (e.g., primary care offices, acute care hospitals, rehab centers, chronic care facilities). The delivery system must maintain its core plant and periodically upgrade to keep facilities and equipment in efficient working order and to be able to support evolving needs of the organization.

(continued...)

Initially, 70% of the delivery system's infrastructure resources are assumed to be committed to maintaining and improving the core plant.

Customer Satisfaction

Customer Satisfaction is an index which ranges from 0 to 100 (%). The higher the number, the higher the level of customer satisfaction with your delivery performance. The level of Customer Satisfaction generated by the delivery system is based on the level of access and the quality of services people receive. The prices you charge can move the basic level of customer satisfaction up or down.

Customer Satisfaction does not change instantly! It takes a while to alter perceptions in the marketplace.

Defined Population

The defined population represents the people who use your delivery system as their source for care. People become part of your defined population by choosing one of the physicians or facilities that are part of your delivery system, or they may be directed by their health plan to use one of your physicians or facilities as a "covered" or "preferred" provider.

The population has characteristics: an age distribution similar to the U.S. average, a level of average need per person for healthcare services that corresponds to age group and a type of health plan affiliation. As you progress through the simulation, you can select certain attributes of the defined population and you will be able to test strategies with different population types.

Debt; Debt\Asset

Debt is the amount of money you owe lenders—the remainder of the amount you have borrowed (both short-term and long-term) less the amount you have paid back.

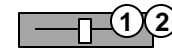
Debt\Assets ratio is a barometer of your level of debt relative to your assets, or how financially leveraged you are. As your level of debt (both long-term and short-term)—relative to the total Book Value of your Assets—rises, financial institutions become less willing to loan you money. In your market, a debt\asset ratio of up to 60% is considered acceptable. Above this level, lenders become wary. Your delivery system is starting with 46% debt to asset ratio.

Depreciation Expense

Depreciation is an item on your expense sheet which represents the amount at which the value of your physical assets has declined in a year due to wear and tear or obsolescence. It is a non-cash expense; it won't affect your available cash, but it is an expense line item that enables you to set aside those funds for equipment/plant replacement needs.

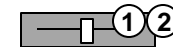
Depreciation is calculated as the historical cost of physical assets divided by an assumed average life (12.5 years) of the assets.

Desired Percent Financed



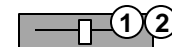
This represents the amount of your investments in clinical programs/practices and infrastructure that you wish to finance by long-term borrowing. You may finance up to 100% of your investments—if lenders approve (see Approval Index)—by pulling this strategy lever. Long-term debt is repaid over 10 years at an annual 12% interest rate. Your initial long-term debt is based on your delivery system size.

Desired Short Term Borrowing



Desired Short Term Borrowing is the amount of money (in millions of dollars) that you wish to borrow to cover near-term operating expenses. Up to \$5 million can be accessed each year—if lenders approve (see Approval Index)—by pulling this strategy lever. Short-term debt is repaid over the next 2 years at with an annual interest rate of 9%. Your initial short-term debt is based on your delivery system size.

Downsizing



Downsizing means laying off some portion of your delivery system's human resources (expressed as a percentage). Downsizing will reduce your operating expenses. Too much downsizing (aggressive and/or frequent downsizing), however, will build up fear among your staff (see Fear).

Downsizing may be a desirable intervention if your need\delivery balance is significantly less than 1.0 (indicating more delivery capacity than the population needs).

Excess Death Index

The EDI indicates how many deaths have occurred in your defined population, relative to the number that would have occurred had the population experienced the “normal” number of deaths over the interval.

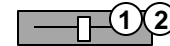
Initially the EDI has a value of 100, which means that the number of deaths is exactly equal to the number that would have been expected to occur in the population. This is your “base case”. An EDI of 90 would mean 10% fewer deaths and an EDI of 110 would mean 10% more deaths.

The EDI is established based on life expectancy data. It is influenced by clinical programs which can result in some extension of life expectancy. It can be adversely affected by poor quality or limited access to care.

Fear

Fear among your staff will be stimulated by aggressive or repeated downsizing. Fear normally dissipates each year; however, the rate of dissipation in a given year is dependent on the level of fear that has built up. If you cause fear to build faster than it dissipates, your delivery system's productivity and rate of learning will be adversely affected and your workforce turnover rate will increase. Initially, your delivery system is starting with no fear.

Fee for Service; FFS Charge

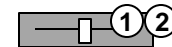


Fee for service is a method of payment for the delivery of services in which the healthcare delivery system receives some level of payment for each service provided. Payors (e.g., health plans, government agencies, employee groups, individuals) pay for care based on the use of services and the particular fee that has been established for the service.

FFS charges are the fee levels set by the delivery system. Increased fees will add revenue per unit of service delivered; however, increases cannot be tolerated forever. At some point, people won't be able to pay high prices; and fee levels much greater than usual market rates will cause people in your defined population to leave your delivery system for competitors.

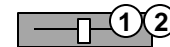
FFS Charge is expressed as an index which is initially set at 100, indicating parity with your competition's prices.

Hiring



Hiring means bringing on new human resources to your delivery system—above and beyond replacement of attrition. (The simulation model automatically “hires” to replace personnel who quit.)

HR Utilization Percent



HR utilization means use of the delivery system staff and services. If utilization is 100%, then people in delivery system are fully occupied performing their functions—working “flat out”—and no “slack” exists in the system. A 90% utilization rate is considered normal.

Your human resources can be “pushed” to work harder, but HR utilization rates approaching and exceeding 100% will cause burnout (see Burnout).

Human Resources

Human Resources represents the people employed by and associated with your delivery system who deliver care and operate the organization. They include physicians and other clinical personnel, technicians, administrators, support staff, etc.

You can alter the pool of human resources by pulling the strategy levers for Hiring or Downsizing. You can determine how fully your human resources are used by pulling the strategy lever for HR Utilization Percent.

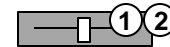
You can monitor attributes of your human resources, such as their productivity, average knowledge level, level of fear or burnout.

Information Systems



Information systems include the hardware, software, and the data base that is maintained by the delivery system for clinical, financial and operations management. Organizations must continuously upgrade hardware capacity, software design and data collection methods to keep current and to be able to support evolving needs of the organization.

Initially, 20% of your delivery system's infrastructure resources are committed to maintaining and improving information systems.



Infrastructure

Infrastructure includes the delivery system's processes, systems, equipment and facilities with which it operates the organization. The "state" of the infrastructure--how well it supports sound operating practices--influences the efficiency of human resources and the delivery system's capacity to perform its functions.

When you invest in Infrastructure, you are adding to or improving your existing infrastructure, which is initially assumed to be in a condition comparable to other delivery systems in your region.

Liquidity

Liquidity is a financial measure which indicates how much financial resources you have relative to what you need to cover expenses.

The liquidity index in this simulation represents your ability to cover desired spending. When the index is 100%, your financial resources are 100% of what you need. Numbers greater than 100% mean you have more than you need to cover your average level of spending, and numbers less than 100% mean you are short of financial resources. When liquidity drops to 70%, lenders will not approve new debt and your organization leadership will not permit new investments.

Long Term Debt

This represents the amount of your investments in clinical programs/practices and infrastructure that you wish to finance by long-term borrowing. You may finance up to 100% of your investments—if lenders approve (see Approval Index)—by pulling the strategy lever, "Desired % Financed." Long-term debt is repaid over 10 years at an annual 12% interest rate.

Market Share

Market share represents the size of your defined population as a percentage of the total area population. A 20 % market share, for example, means that 20% of people (or 1 out of every 5 people) in the total market are electing to come to your delivery system instead of coming to a competitors' delivery system.

Need\Delivery Balance

The need\delivery balance indicates the need for services (being expressed by your defined population) relative to your delivery system's ability to provide services to meet this need.

(continued...)

A value of 1.0 means that, on average, needs are in balance with delivery. It doesn't mean that you are able to meet every need. Therefore, values of the need/delivery balance below 1.0 indicate improved access. Values above 1.0 mean that needs are outpacing delivery, and some needs are not being met.

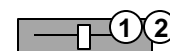
Need\Person\Year

Need per person per year is an index which indicates the general health status of the population. It represents the average level of need for healthcare services among people in your defined population.

The index begins in 1995 at a value of 1.0. The index then evolves over time as a result of both inherent forces in the population (e.g., aging, engaging in risky behaviors) and delivery system actions (e.g., access and service quality levels). If the index rises above 1.0, need per person is increasing relative to 1995 levels. If it falls below 1.0, need has fallen relative to initial levels.

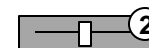
Net Cash Flow

Net cash flow is reported in the simulation financial table, and it represents the cash you have available from which you can make new investments or from which you will draw for future operations and obligations. Net cash flow is calculated as revenues and short-term borrowed funds less cash expenses, debt repayments, non-financed \$ for infrastructure and non-financed \$ for clinical programs.



PMPM Charge

This is the Per Member Per Month fee that is paid by people in your defined population who are enrolled in HMO (capitation-type) health plans. It is expressed as an index with the initial value at 100, which represents parity with competitor's fees.



Prevention

Prevention programs and practices—a subset of Clinical Programs and Practices (see above)—are those aimed at segments of the population who are felt to be “at risk” for engaging in risky behaviors (such as tobacco use) with the goal of preventing them from starting such behaviors.

Such programs typically target school-age and, to a lesser extent, young working people. Prevention programs have shown some success, with 20 to 40% fewer people engaged in risky behaviors as a result of participation in the prevention program. (continued...)

Initially, 5% of the clinical programs of your delivery system are assumed to be committed to prevention.



Process Improvement

Process Improvement activities are undertaken by teams within the delivery system to examine and improve the processes by which care is delivered and work is done. The goals of Process Improvement activity include improved productivity (i.e., efficiency, effectiveness and appropriateness) of the work and high levels of customer satisfaction. Both clinical and non-clinical function benefit from Process Improvement.

Organizations must continuously work on process improvement to keep current and to be able to meet the evolving needs of customers. Process Improvement activities have been shown to yield 25 to 50% improvement in efficiency/effectiveness.

Initially, 10% of the infrastructure resources of your delivery system are assumed to be committed to process improvement activities.

Productivity; Productivity Index

Productivity represents the number of service units each staff member can process in a given time period. Productivity improvement is an essential determinant your ability to deliver services at a rate which meets demand.

Productivity is influenced by many factors: the knowledge level of your workforce, the condition of your core plant/equipment, the level of process improvement activity in your organization, the percent utilization you have set for your workforce, and the presence of burnout or fear. Productivity is expressed as an index with an initial value of 1.0.

Relative Attractiveness, Price and Service Index

Relative attractiveness is an index which indicates the attractiveness of your delivery system to customers relative to the attractiveness of competitor systems. It is based on both price and service levels (quality and access). These measures are each expressed as an index, with a value of 1.0 indicating that you are equal to the competition.

(continued...)

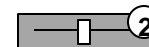
Relative price is your price for services relative to the competition's. The price index is made up of a weighted average of your average fee-for-service and your average pmpm charges. When the relative price index is greater than 1.0, your prices are (on average) higher than the competition.

Relative service index is your service index relative to the competition's. The service index is determined based on both access and quality, with the lowest of the two factors determining the value of the overall index. When the relative service index is greater than 1.0, your performance is (on average) better than the competition.

Risky Behaviors

Risky Behaviors in the population are those which contribute to the incidence of disease or injury. Examples include alcoholism, poor diet, tobacco use and unprotected sexual activity.

Screening



Screening programs and practices—a subset of Clinical Programs and Practices (see above)—are those aimed at segments of the population who are felt to be “at risk” for chronic disease with the goal of early detection so that early treatment can be initiated.

Such programs (such as mammography) have shown some success for selected diseases (such as breast cancer).

Initially, 20% of your delivery system's clinical programs are assumed to be committed to screening.

Service Index

The Service Index reflects the overall level of service being supplied by the delivery system. The index is determined by taking the minimum of two indices: the level of service quality and the level of access to services.

The idea here is that either poor service quality or poor access to service will undermine delivery of health services and hence lower health status (and also drive people to the competition).

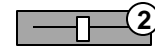
Short Term Debt

Short term debt is the amount of money (in millions of dollars) that you have borrowed to cover near-term operating expenses. Up to \$5 million can be accessed each year—if lenders approve (see Approval Index)—by pulling the strategy lever, “Desired Short Term Borrowing.” Short-term debt is repaid within 2 years at an annual interest rate of 9%. Your initial short-term debt is based on your delivery system size.

Surplus

Surplus refers to the excess of revenue over expenses. (Other terms with essentially the same meaning are net income or profit.) Surplus funds are used for continued operations and new investments. Organizations must produce a surplus to keep the business operating in a competitive state.

Surplus percent means the surplus amount as a percent of total revenue. This is a useful measure of operating performance across different sized delivery systems.

Treatment

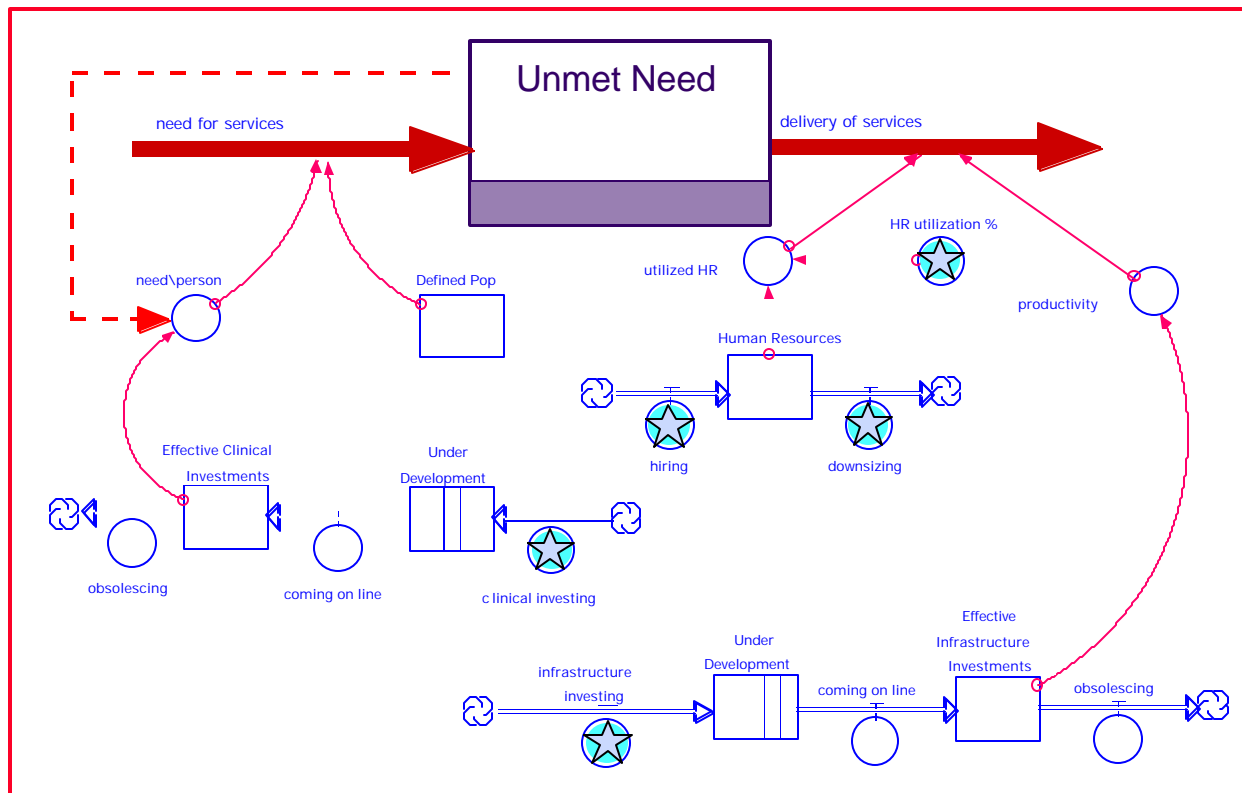
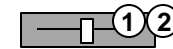
Treatment programs and practices—a subset of Clinical Programs and Practices (see above)—are those aimed at segments of the population who in conditions which require health care, with the goal of either recovery or minimizing the disabling effects of conditions. Treatment programs use both diagnostic and therapeutic equipment and techniques, and they may be applied in settings ranging from primary care to acute care.

Initially, 70% of your delivery system’s clinical programs are assumed to be committed to treatment.

REFERENCE

SUMMARY DIAGRAMS

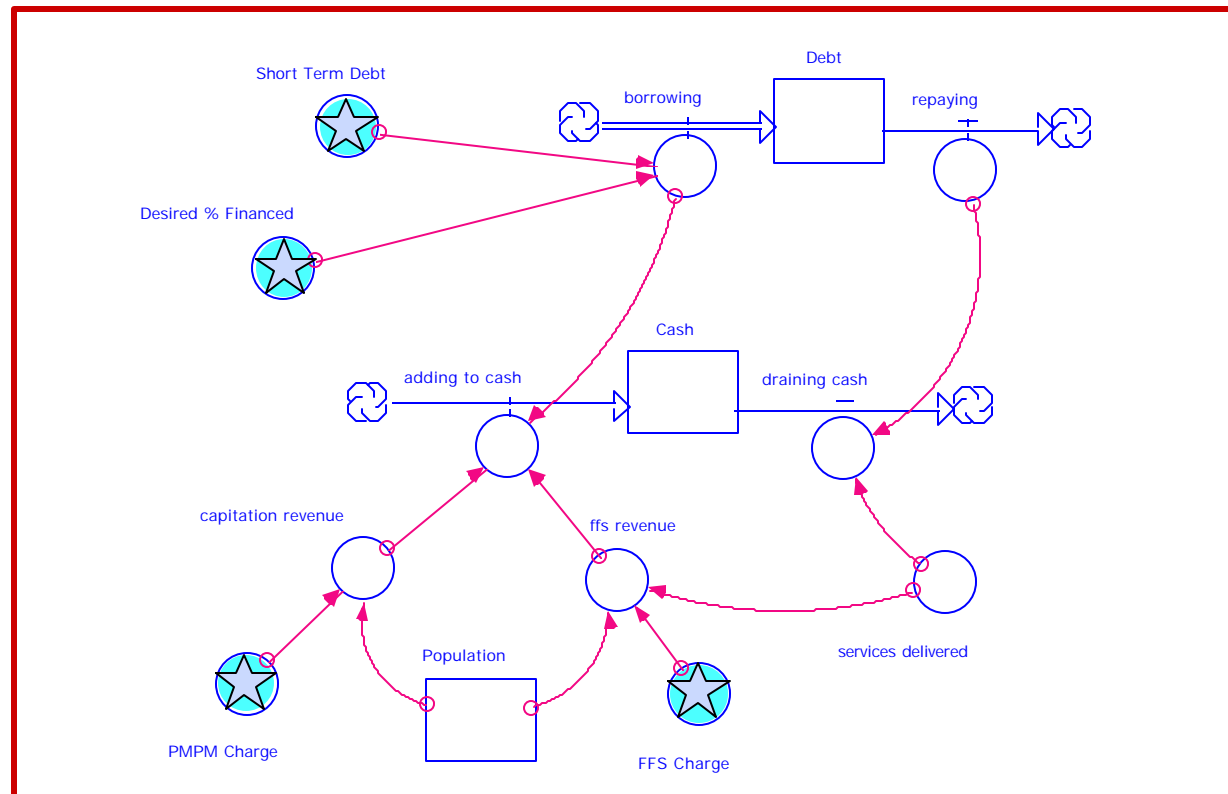
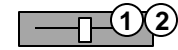
Strategy Levers: Human Resources and Investments



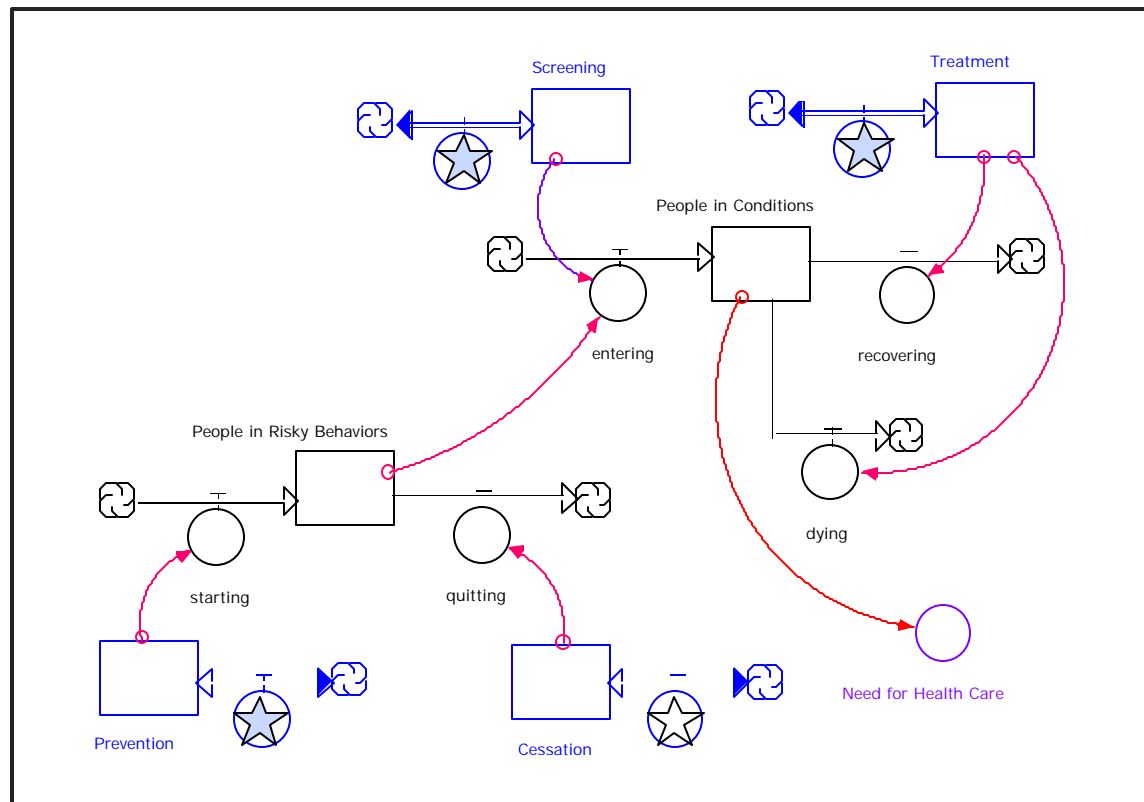
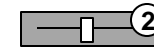
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SUMMARY DIAGRAMS

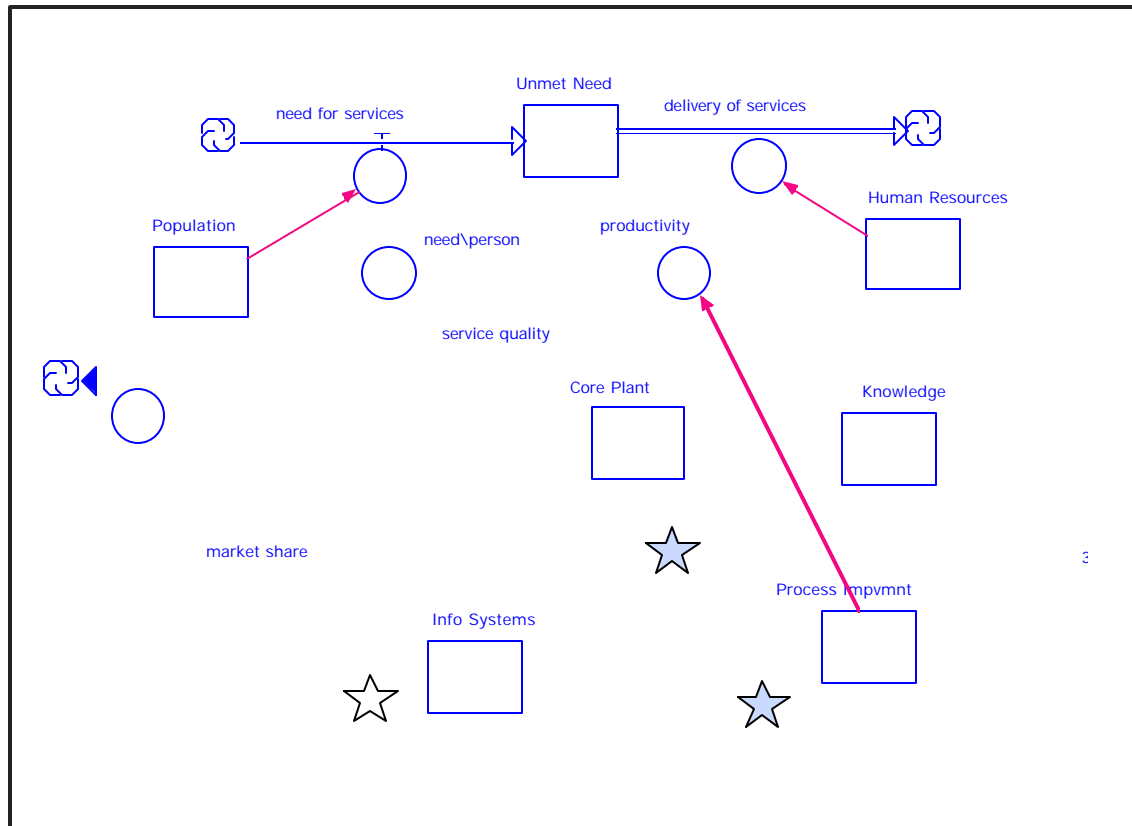
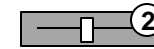
Strategy Levers: Financial



Strategy Levers: The Influence of Clinical Investments



Strategy Levers: The Influence of Infrastructure Investments



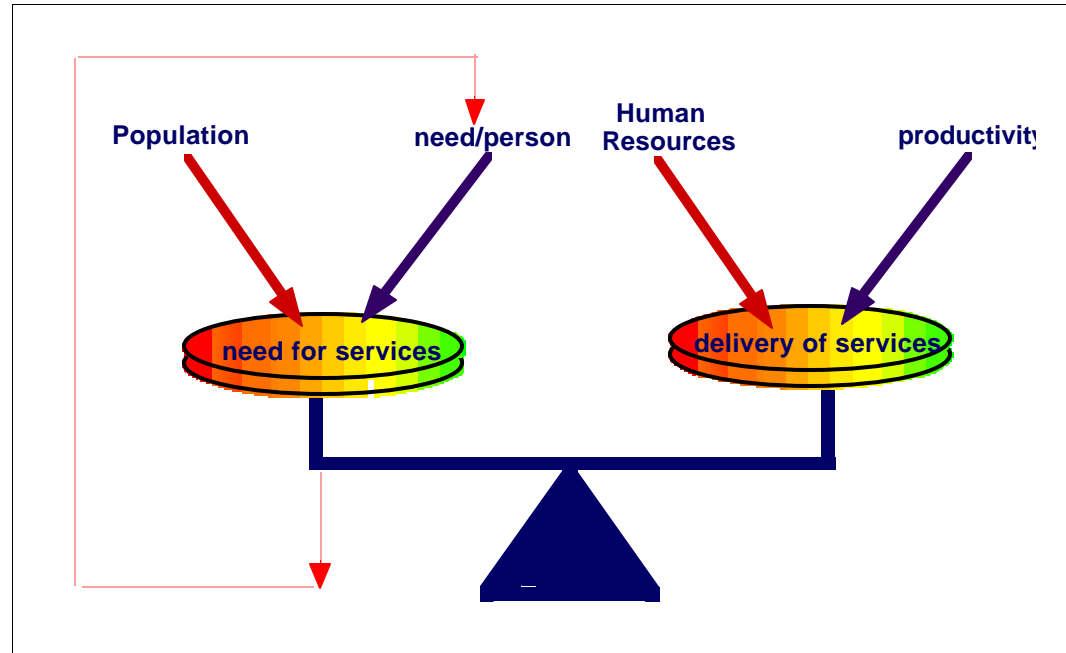
Framework 1: The Need/Delivery Balance

- To optimize health and/or business performance one must understand how to maintain a balance between need and delivery. The task is complex because the variables that are driving each are changing dynamically, with the changes being driven by a richly interdependent set of feedback relationships.

Exploring those feedback relationships, which are in the simulation and explained in “coaching” segments, is the primary task of the team-learning experience in “Practice Field 1.”

- Total need for services is driven by the size of your defined population and the average need per person. If the level of need exceeds the level of delivery, then access will be poor and unmet needs will drive the average need per person higher—potentially creating a vicious reinforcing dynamic.

- Total capacity for delivery of services is determined by the number of human resources that makes up the delivery workforce and their average level of productivity (i.e., their ability to efficiently complete tasks while maintaining high quality). Productivity is affected by knowledge levels in the organization and the condition of its infrastructure (i.e., information systems, process improvement activities).



REFERENCE

SUMMARY DIAGRAMS

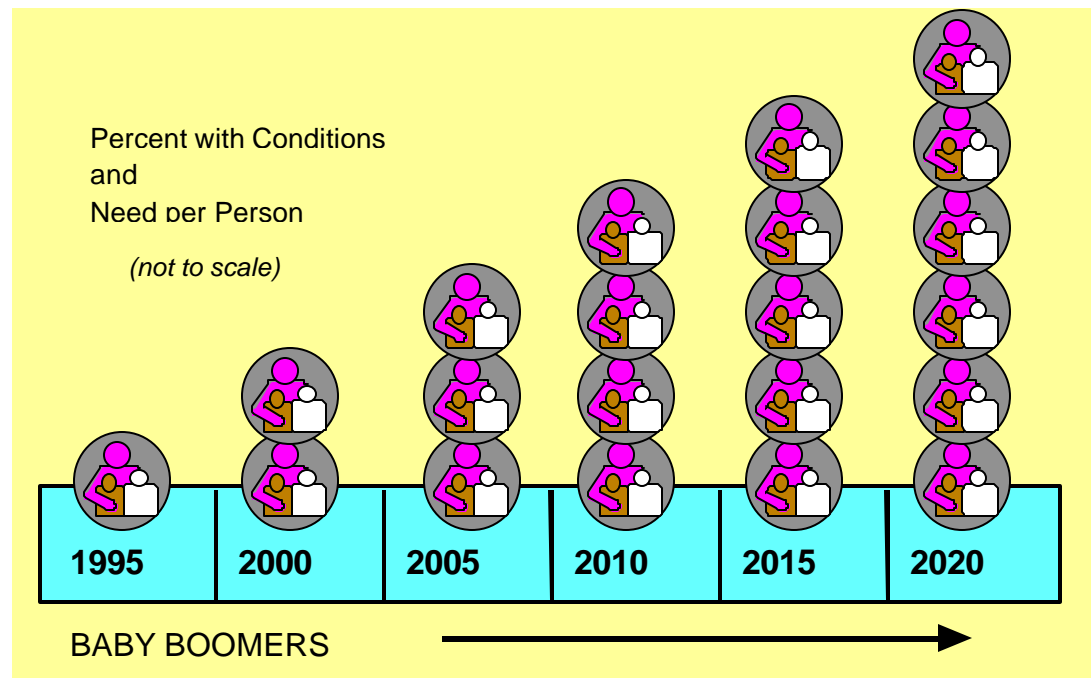
Framework 2: The Basis for Growing Need per Person

- The demographic profile of your defined population includes a large proportion of people in the “baby boom” age group—now in their 40’s and 50’s—who will soon be entering the age groups in which they show symptoms of chronic disease (such as heart disease and cancer). Their healthcare needs will place increasingly heavy demands on an already-financially-stressed healthcare delivery system.

- To what extent can the healthcare delivery system influence either the percent of people who enter conditions (by acting “upstream” to prevent risky behaviors) or the functional status of people in conditions?

These are among the central questions explored by teams in “Practice Field 2.”

- Prevention initiatives can pay off in the long term, but the baby boomers are already in the “pipeline” (due to 20+ years of engaging in risky behaviors) for disease. Regardless of prevention initiatives begun today, the healthcare delivery system will have to be able to treat the population with conditions. With limited resources, it will be essential to improve the effectiveness and efficiency of treatment practices.

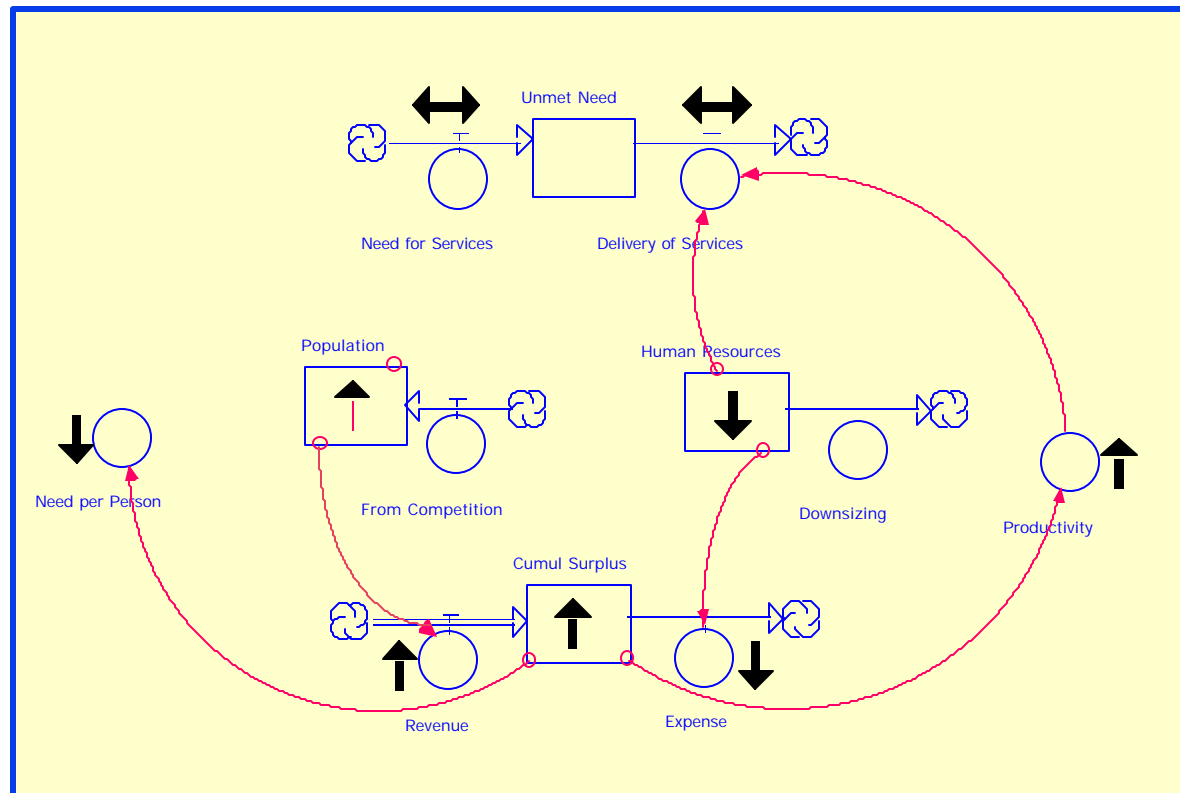


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SUMMARY DIAGRAMS

The Optimizing Machine

- Core dynamics are at play in the system with profound, interdependent effects on both population health and delivery system sustainability.
- The key to performance is to simultaneously reduce need for services and increase delivery productivity. Delivery system services must be effective, efficient and appropriate.
- The surplus funds that result can then be used for further investment to continue to improve both clinical programs/practices and the operating infrastructure on which the system depends.
- The idea is to set in motion a beneficial reinforcing dynamic, which fuels further growth and improvement—a veritable Optimizing Machine.



REFERENCE

BASIS FOR THE MODEL

The simulation model was built in stages.

- 1 An initial model was built which represents the population in six age cohorts, by gender. The population was distributed among the following behaviors and conditions:

- _ Risky Behaviors: Alcoholism, Non-Immunization, Poor Diet and Exercise, Smoking, Unsafe Sex
- _ Conditions Requiring Healthcare: Breast Cancer, Depression, Diabetes, Early Childhood Diseases, Heart Disease, HIV/AIDs, Lung Cancer, Major Injuries

These behaviors and conditions were selected to be illustrative (not comprehensive) of influences on population health. Data were drawn from sources listed below to represent U.S. average experience as reported in the literature and available data bases.

- 2 The initial model also included healthcare delivery system data—again, drawn from common sources to be representative of current experience.
- 3 The initial model was very large—too large to be comprehensible and useful for most organizations, which want a learning experience that can achieve objectives within approximately a two-day workshop.
- 4 The initial simulation model was therefore condensed to replicate the core dynamics at play in the population-healthcare delivery system, and it was segmented into two models which underlie the two “practice fields” in the simulation.
 - _ Practice Field 1 is based on the simpler model and portrays core dynamics of the business and core attributes of the population.
 - _ Practice Field 2 expands the model to enable the learner to further explore key attributes of the population which affect health and the potential of the delivery system for influencing health by taking different initiatives.

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ABOUT THE DEVELOPERS

Risky Business: Mastering the New Business of Health was created by a partnership of three organizations.

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